San Francisco Public Utilities Commission Comments Regarding Tentative Order for Renewal of the NPDES Permit No. CA0037681 for the Oceanside Water Pollution Control Plant, Wastewater Collection System, and Westside Recycled Water Project

Attachment A - Summary Table of Comments

In order to assist Regional Water Board and EPA staff in locating the sections of the Tentative Order being commented on, the page numbers and sections provided correspond to the Tentative Order publicly noticed on April 19, 2019. The sequence of issues raised in these comments follows the organization of the Tentative Order and does not reflect the relative importance of each issue to the SFPUC.

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1	5	III.D	SFPUC requests that the phrase "to a water of the United States" be added to Discharge Prohibition III.D to align this prohibition with Discharge Prohibition G in the existing permit, and with other language in the Tentative Order. Specifically, the requested change would clarify that this prohibition does not apply to Sewer Overflows from the Combined Sewer System.	Discharge to a water of the United States from any location other than Discharge Point No. 001 is prohibited, except from Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-004, CSD-005, CSD-006, and CSD-007 during wet weather (as defined in Attachment A) in accordance with the requirements in this Order.
2	7	V	The SFPUC is concerned that inclusion of a broad requirement to comply with receiving water limitations in addition to the specific water quality based effluent limitations in the permit creates uncertainty regarding whether compliance with the more specific terms of the permit – especially those related to wet weather – is sufficient to ensure that discharges are not causing or contributing to violations of water quality standards. Please see Attachment B for more detailed comments. If the Regional Water Board and EPA do not delete this standard provision and the broad prohibition on nuisances in Attachment G (see Comment No. 58), the SFPUC requests the edits specified in Comment Nos. 3, 54, and 55 to more explicitly clarify the applicability of these provisions to dry weather discharges only.	V. RECEIVING WATER LIMITATIONS. Discharge shall not cause or contribute to a violation of any applicable water quality standard (with the exception set forth in State Water Board Order No. WQ 79-16) for receiving waters adopted by the Regional Water Board, State Water Resources Control Board (State Water Board), or EPA as required by the CWA and regulations adopted thereunder. If more stringent water quality standards are promulgated or approved pursuant to CWA section 303, or amendments thereto, the Regional Water Board and EPA may revise or modify this Order in accordance with the more stringent standards.
3	7	IV.B	See explanation of request in Comment No. 2	During wet weather, the Discharger shall comply with the narrative water quality-based effluent limitations contained in Provision

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				VI.C.5.c (Long-Term Control Plan) for the Discharge Points in Table 2.
4	13	VI.C.4.b.iv	SFPUC requests that the local limits evaluation be due with the Report of Waste Discharge (ROWD). SFPUC has a single Pretreatment Program that includes both the Oceanside and Southeast Water Pollution Control Plants, and local limits apply citywide. Because the two plants' permits are adopted separately and at different times, SFPUC requests the evaluation be due by the ROWD due date. SFPUC plans to evaluate local limits for both plants every five years, but timing of this evaluation and the permits' effective dates plus 180 days may not coincide.	Evaluation of the need to revise local limits as required under 40 C.F.R. sections 122.44(j)(2)(ii) and 403.5(c)(1) and, within 180 days following the effective date of this Order by < <insert date="" due="" rowd="">>, submission of a report describing the changes to local limits with a plan and schedule for implementation, or the rationale for making no changes to local limits.</insert>
5	13 – 14	VI.C.4.d	SFPUC requests the addition of clarifying language that compliance with the State Water Board Order No. 2006-0003-DWQ as amended by Order No. WQ 2013-0058-EXEC is separate from the NPDES permit. The suggested language is consistent with the recently adopted permits for West County Agency (Order No. R2-2019-0003) and City of Palo Alto (Order No. R2-2019-0015).	d. Separate Sanitary Sewer Systems. State Water Board Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, as amended by State Water Board Order No. WQ 2013-0058-EXEC, contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. While the Discharger must separately comply with both Thethe statewide WDRs and this Order, the statewide WDRs more clearly and specifically stipulate requirements for operation and maintenance and for reporting and mitigating sanitary sewer overflows. Implementing the requirements for operation and maintenance and mitigation of sanitary sewer overflows set forth in the statewide WDRs (and any subsequent order updating those requirements) shall satisfy the corresponding federal NPDES requirements specified in Attachments D and G of this Order for the separate sanitary collection systems. Following the reporting requirements set forth in the statewide WDRs (and any subsequent order updating these requirements) shall satisfy the NPDES reporting requirements for sanitary sewer overflows specified in Attachments D and G.

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6	15	VI.C.5.a.i.(f)	SFPUC requests changes to clarify that the annual inspections are limited to combined sewer outfalls, consistent with Oceanside's current permit, the SFPUC Southeast Plant permit, CSO Control Policy guidance on Nine Minimum Control implementation, and the subsequent text within that provision (e.g., "entering the regulator structure adjusting tide gates").	 (f) Inspections. The Discharger shall conduct an inspection program of the combined sewer system to provide reasonable assurance that unpermitted discharges, obstructions, and damage will be discovered. At a minimum, the Discharger shall do the following: (1) Inspect each combined sewer discharge outfall and associated structures (e.g., tide gates and sensors) critical facility and major system component identified in accordance with Provision VI.C.5.a.i(c), above, at least once every 12 months to ensure they are in good working condition. The inspection shall include, but not be limited to, Inspections of outfalls shall include entering the regulator structure, if accessible; determining the extent of any structural defects or debris and grit buildup; removing any debris that may constrict flow, cause blockage, or result in a prohibited discharge; and adjusting tide gates to minimize combined sewer discharges and to prevent tidal inflow.
7	15	VI.C.5.a.ii. (a)	SFPUC requests removal of the requirement to control intrusion from receiving waters. "Intrusion" is not defined in the Tentative Order, but is assumed to be a situation wherein Bay or Ocean water enters the combined sewer system via a combined sewer discharge (CSD) weir during high tides. This does not occur on the Westside of the City because the CSD weir elevations are quite high relative to the tidal height, even under King Tide conditions. As such, the City proposes that this control measure be removed.	 ii. Control No. 2: Maximize Use of Collection System for Storage. The Discharger shall maximize use of the combined sewer system for in-line storage to reduce the magnitude, frequency, and duration of combined sewer discharges. At a minimum, the Discharger shall implement the following controls: (a) Prevent intrusion of receiving waters into the combined sewer system;
8	15	VI.C.5.a.ii. (b)	SFPUC does not own any inoperative or unused treatment facilities, and the requirement to use all operative facilities is addressed in the LTCP provisions related to operations during wet weather. As such, the City proposes that this control be removed.	(b) Use all facilities, including any inoperative or unused treatment facilities, to store or treat wet weather flows to the maximum-extent practicable; and

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9	15	VI.C.5.a.ii	The SFPUC is strongly concerned that the Tentative Order's requirements related to sewer overflows from the combined sewer system (SOCSS) are inappropriate and have no basis in in the CSO Control Policy. See Comment Nos. 16 and 17. The SFPUC is amenable, however, to reporting the occurrence, cause and location of SOCSS to facilitate EPA, Regional Water Board, and the public's evaluation of the effectiveness of the City's operation and maintenance of the collection system. The changes requested require reporting to CIWQS and are consistent with the City's recent efforts to standardize field response to and recordkeeping of sewer overflows in both the combined and separate sewer systems. This reporting is being proposed as an element of Control No. 2: Maximize Use of the Collection System for Storage. The SFPUC requests replacement of the Tentative Order language that referenced the State's Waste Discharge Requirements for Sanitary Sewer Systems ("SSS WDR"), Order 2006-0003-DWQ, with language that explicitly identifies the reporting requirements in that order that apply to discharges of untreated wastewater from a collection system that do not reach surface waters. The SFPUC's concern is that incorporation of the "notification and reporting requirements" of the WDR into the permit leaves open to interpretation the specific requirements that are applicable here. All requirements enumerated in the SFPUC's requested changes are intended to be identical to those in the State Water Board's SSS WDR.	To allow evaluation of the Discharger's program to properly operate and maintain the combined sewer collection system, the Discharger shall undertake the following within six months of the effective date of this order: 1) Complete the CIWQS Online Collection System Questionnaire and begin entering all SOCSS information into the CIWQS Online SSO Database. All information entered into the CIWQS Online SSO Database shall be certified by the Discharger's Legally Responsible Official(s). The Collection System Questionnaire shall be updated and certified every 12 months. 2) Begin reporting all SOCSS 1,000 gallons or greater by submitting a draft report to CIWQS within 3 business days of becoming aware of the SOCSS and certifying within 15 calendar days of the SOCSS end date. 3) Begin reporting all SOCSS less than 1,000 gallons by submitting a certified report to CIWQS within 30 calendar days of the end of the month in which the SOCSS occurred. 4) Begin certifying that no SOCSS occurred within 30 calendar days of the end of the month.
10	16	VI.C.5.a.iv	SFPUC suggests the modifications for clarity. The requirement to operate at "maximum capacity" is confusing in light of the specific	iv. Control No. 4: Maximize Flow to Treatment Plant. The Discharger shall operate fully utilize the Oceanside Water Pollution Control Plant at maximum capacity during wet weather.

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			operational requirements in the LTCP provisions.	The Discharger shall maximize the volume of wastewater that receives treatment at the Oceanside Water Pollution Control Plant (i.e., secondary treatment for 43 MGD and primary treatment for an additional 22 MGD) and is discharged at Discharge Point No. 001.
11	16	VI.C.5.a.vi	SFPUC has already installed infrastructure to control solids and floatable materials in combined sewer discharges. The suggested language is to clarify that the control of solids and floatable materials in combined sewer discharges does not require new capital projects. Instead, it requires that existing infrastructure for solids and floatable materials control be maintained as operational, and that the City continue implementation of relevant best management practices (e.g., street sweeping) as described by EPA guidance on implementation of the Nine Minimum Controls.	vi. Control No 6: Control Solid and Floatable Materials in Combined Sewer Discharges. The Discharger shall continue to implement measures to minimize the volume of solid and floatable materials in combined sewer discharges (e.g., equip Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-004, CSD -005, CSD-006, and CSD 007 with baffles, screens, or racks, or other means to reduce the volume of solid and floatable materials). The Discharger shall also remove and properly dispose of solid and floatable materials captured in the combined sewer system.
12	16 – 17	VI.C.5.a.vii i. (a)	SFPUC requests the removal of repetitive language. A detailed list is included in the bullets following the paragraph as part of the same control number.	(a) Combined Sewer Discharges. The Discharger shall inform the public of the location of combined sewer discharge outfalls (i.e., Discharge Point Nos. CSD 001, CSD-002, CSD-003, CSD-004, CSD 005, CSD-006, and CSD 007), the actual occurrences of combined sewer discharges, the possible health and environmental impacts of combined sewer discharges, and the recreational or commercial activities (e.g., swimming, shellfish harvesting) curtailed as a result of combined sewer discharges.
13	17	VI.C.5.a.vii i. (a)(1)	SFPUC requests removal of overly prescriptive requirements about permanent signage. Flexibility is required to enable engagement of various stakeholders, including the San Francisco Department of Public Health and the federal entities that own the shoreline. For example, the National Park Service controls access and is required to approve the terminology, size, font size, and material of	(1) The Discharger shall maintain permanent identification signs at the locations of Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-005, CSD-006, and CSD-007, and at public access points. The Discharger shall inspect, and replace as necessary, all permanent signs at least once per calendar year to ensure that the signs are visible and readable. New or replacement signs shall be a minimum of 12 by 18 inches, with a font size of at least 50; be printed on reflective material; and contain the following information, at a minimum:

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			signage at beaches in the Golden Gate National Recreation Area.	 SFPUC Discharge Point No. (discharge identification number). Report dry weather discharges at (telephone number). Description of discharge, including the words "sewage" and "pathogens" This outfall may discharge sewage mixed with rainwater during or following rain events. Avoid water contact pathogens that cause illness may be present in the discharge. Warning, alert, caution, or other term to notify the public that caution is needed.
14	17	VI.C.5.a.vii i(a)(2)	SFPUC staff post warning signs at beach locations where water contact recreational activities may be affected by combined sewer discharges. The signs are posted on the same day as the combined sewer discharge event or the next morning if the discharge occurs in the evening. SFPUC requests a change to the required morning and evening timing to within two hours of civil twilight and 4:00 p.m. because of safety and limited accessibility. Depending on the time of year and weather conditions, posting all City sites by 8:00 a.m. would require staff to perform these activities in the dark, which presents significant safety concerns. Many posting locations and surrounding areas have minimal or no artificial lighting, making natural sunlight the main source of light. Civil twilight is defined as the time period when the sun is no more than six degrees below the horizon at either sunrise or sunset. It is the time in which there is enough solar illumination for the human eye to clearly distinguish terrestrial objects, meaning that a recreator would be able to carry on ordinary outdoor activities and there would be enough natural sunlight and visibility for staff to perform posting. Two hours provides time for	(2) The Discharger shall post warning signs, including "No Swimming" signs, at beach locations whenever a combined sewer discharge occurs to inform users that bacteria concentrations may be elevated. The Discharger shall post warning signs within four hours of when the discharge commences unless the discharge begins after sunset, in which case, the Discharger shall post warning signs by 8:00 a.m. the following day. on the same day as the combined sewer discharge event unless the combined sewer discharge occurs after 4:00 p.m., in which case, signs shall be posted within two hours after morning civil twilight the next day. Signs shall be posted until analysis indicates that water quality meets bacteriological standards for recreation.

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			staff to travel and post at various locations throughout San Francisco during larger storms and/or more difficult weather conditions. In addition, at certain locations, the U.S. National Park Services closes sites at least one or more hours prior to sunset, making it impossible to post when a CSD occurs within an hour of sunset. For example, on May 6, 2019, a park hours sign was adjusted to close at 5 p.m. when sunset occurred at 8 p.m. The proposed 4:00 p.m. time presents much less accessibility issues because the earliest sunset time in San Francisco occurs at about 5:00 p.m.	
15	17	VI.C.5.a.vii i(a)(4)	SFPUC provides electronic notification of CSDs on its website and telephone hotline. The purpose of this public notification is to provide day-of information for the public to understand whether it is safe to use the water for recreational activities. It is not clear how notification of CSD duration furthers this purpose. The duration of a CSD is not an indicator of how safe it is to be on the beach; rather the reported fecal indicator bacteria concentrations are the indicators. Moreover, determining CSD duration requires an involved calculation, making day-of notification infeasible. In addition, when an ongoing discharge is occurring, the CSD duration is changing (i.e., a moving target), so the value is unknown when our staff perform day-of notifications.	(4) The Discharger shall provide electronic notification of combined sewer discharges through a free-access website and telephone hotline. The electronic notification shall include information about the location, duration, and impacts of combined sewer discharges, and provide a telephone number for the public to report discharges.
16	17	VI.C.5.a.vii i.(b)	The SFPUC strongly objects to the various provisions in the Tentative Order related to Sewer Overflows in the Combined Sewer System (SOCSS). More specifically, the SFPUC disagrees that EPA or the State has jurisdiction	See Comment No. 9 for proposed language regarding reporting of SOCSS.

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			over discharges within the combined sewer system that do not reach surface waters, and which have no potential to do so. The Tentative Order implicitly and explicitly indicates that the CSO Control Policy regulates SOCSS. The SFPUC requests identification of the specific provisions in the Policy and/or any implementing guidance to support this position. The SFPUC conceptually agrees, however, that the frequency, cause and location of SOCSS may be a metric to evaluate the effectiveness of operation and maintenance of the collection system to the extent that they are indicative of blockages that may reduce storage capacity. Accordingly, in order to facilitate this evaluation, the SFPUC is willing to report SOCSS to the State's CIWQS database provide that the changes requested below are made.	
17	17	VI.C.5.a.vii i.(b)	The SFPUC requests that the requirement to report SOCSS be removed from the provision related to Nine Minimum Control Measure 8. Neither the CSO Control Policy or related guidance requires or otherwise contemplates the reporting of SOCSS. For example, <i>EPA Combined Sewer Overflow Guidance for Nine Minimum Controls</i> , EPA 832-B-95-003 (May 1995) is entirely limited to discharges to receiving waters, stating: "The intent of the eighth minimum control, public notification, is to inform the public of the location of CSO outfalls, the actual occurrences of CSOs, the possible health and environmental effects of CSOs, and the recreational or commercial activities (e.g., swimming and shellfish harvesting) curtailed as a result of CSOs." Pg. 9-1.	Control No. 8: Notify Public of Combined Sewer Discharges and Sewer Overflows from the Combined Sewer System. (b) Sewer Overflows from the Combined Sewer System. For combined sewer system excursions, the Discharger shall notify and report consistent with the sanitary sewer overflow notification and reporting requirements of State Water Board Order. No. 2006 0003 DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems," as amended by State Water Board Order No. WQ 2013 0058 EXEC, and any subsequent order updating these requirements (i.e., State Water Board Order No. WQ 2013 0058 EXEC Attachment A, sections B.1, B.2, B.3, C.2, C.3, C.4, C.5, C.7, and C.8.i).

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18	18	VI.C.5.b	SFPUC requests an annual reporting deadline of February 1 for documentation of the Nine Minimum Controls, consistent with the annual report deadline. That will allow sufficient time for recording and reporting on wet weather performance and dry season maintenance activities, which are typically completed through the end of the dry season in late September.	(2) Documentation of Nine Minimum Controls. The Discharger shall maintain records documenting implementation of the nine minimum controls described in Provision VI.C.5.a. By October-31-February 1 each year, the Discharger shall submit a report to the Regional Water Board and EPA covering the prior October 1 through September 30. The report shall summarize actions taken and planned to implement the nine minimum controls.
19	19-21	VI.C.5.d	The SFPUC strongly disagrees that an update to the City's LTCP is needed or appropriate. The City developed and implemented a multi-billion dollar LTCP that resulted in the current level of wet weather control, which was prescribed by EPA and the State as being protective of beneficial uses. Since completion of the LTCP, the City has performed extensive post-construction monitoring that demonstrates that system performance is consistent with the system design, and that beneficial uses are being protected (see Characterization of Westside Wet Weather Discharges and the Efficacy of Combined Sewer Discharge Controls, July 2014). Findings to this effect have been included in prior permits, including the current OSP NPDES Permit (R2-2009-0062). The requested changes are intended to reflect that the City has implemented a LTCP, and that the purpose of this section is to continue to assess the current performance in light of post-construction monitoring data and sensitive areas considerations. Please see Attachment B for more detailed comments.	Please see the specific line edits proposed in Comment Nos. 20 -27.
20	19	VI.C.5.d	Consistent with the CSO Control Policy, the SFPUC requests modifications to the	d. LTCP Assessment and Update. The Discharger shall assess and update as appropriate its LTCP by implementing the following

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			introductory paragraph to clarify that any LTCP update will be based on an assessment of post-construction monitoring results and an evaluation of sensitive areas. See Chapter 5, Post-Phase II Permitting, EPA Combined Sewer Overflows Guidance for Permit Writers (1995), which identifies these two elements as the only ones applicable to cities that have implemented a LTCP (i.e., "post-phase II permittees").	tasks. The objective of the tasks in Table 7 are to assess and update the LTCP to be consistent with the sensitive area and post-construction monitoring provisions of based on the nine elements described in the Combined Sewer Overflow (CSO) Control Policy. and The Discharger shall submit the required reports to the Regional Water Board and EPA as specified in the table below. In doing so, the Discharger may use previously completed studies to the extent that they accurately provide the required information.
21	19 - 20	Table 7, Task 1	The SFPUC requests replacement of the requirement to evaluate system response to 5 and 10-year design storms with a requirement to evaluate system response to a modeled typical year. As is industry standard and recommended by EPA guidance (EPA Combined Sewer Overflows Guidance for Monitoring and Modeling (1999)), one of the ways that the SFPUC evaluates performance of its combined sewer system is through hydraulic and hydrologic (H&H) model simulations of a typical year. "Typical year" is a technical term used to refer to a series of modified historical storm events that are based on a statistical analysis of a long-term rainfall dataset, and represents long-term rainfall averages in terms of rainfall depth, duration and intensity. The SFPUC has a very detailed and highly calibrated and validated H&H model, and has developed a typical year based on 30 years of measured rainfall data. The ability of the modeled typical year to simulate system performance is high because the results in terms of CSD frequency and volume closely match the long-term annual average monitored performance of the Westside system. Please remove all references to sewer overflows in the combined system in this section. Sewer	1. Post-Construction Characterization, Monitoring, and Modeling of the Combined Sewer System The Discharger shall submit a System Characterization Report with a comprehensive characterization of the combined sewer system developed through records review, monitoring, modeling, and other means as appropriate to establish the existing conditions upon which the updated LTCP Consideration of Sensitive Areas Report (Task 3) will be based. At a minimum, the System Characterization Report shall do include the following: a. Include a A description thorough review of the entire combined sewer system, including how it responds to typical year rainfall various precipitation events (including 3 hour duration, 5 year and 10 year return frequency storms) with respect to the volume and frequency of combined sewer system discharges and sewer overflows from the combined sewer system, considering the impacts of climate change and sea level rise; b. Describe A description of each model used, including a discussion of model calibration and validation; c. Identify tThe location, frequency, and characteristics of actual combined sewer system, and their locations relative to sensitive areas, for at least the last 10 years; d. Describe any temporal or spatial trends of sewer overflows from the combined sewer system. e.d. Identify A summary of available information on the relationship between CSDs and the receiving water quality the impacts that result from combined sewer discharges (at a minimum, compare wet weather average and maximum

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			overflows in the collection system are not relevant to, or mentioned, in the CSO Control Policy and implementing guidance. Sewer overflows do not reach surface waters, are caused by localized constraints and have no relationship to CSDs and the system's ability to maximize storage and treatment. Please replace the requirement to identify water quality impacts of CSDs with a more holistic evaluation of information available on the relationship between CSDs and receiving water quality. The current provision's focus on water quality impacts seems unnecessarily focused on analyses of the pollutant concentrations in CSDs, whereas the SFPUC has other types of data and information (e.g., receiving water monitoring and modeling) relevant to the relationship between CSDs and receiving water conditions. The SFPUC also requests an extension of the deadline to allow time to incorporate the Bayside drainage into these analyses. While the Bayside and Westside are hydraulically distinct, improvements must be identified and prioritized on a citywide basis. Extension of the deadlines will enable the SFPUC to undertake citywide analyses to better inform decision making.	discharge characteristics and receiving water monitoring data with Ocean Plan Table 1 water quality objectives); and ££ Evaluate combined sewer discharge control efficacy (e.g., using TSS as a proxy for pollutant removal efficiency), including a description of any method used. Within 482 months of this Order's effective date.
22	20	Table 7, Task 2	The SFPUC requests replacement of the requirement to submit a Public Participation Plan with a requirement to submit a description of completed and planned public participation efforts related to capital planning, including planning related to CSDs. This change will provide the SFPUC flexibility in engaging the public to ensure that public outreach – like capital planning – is iterative and adaptive. The	2. Public Participation. The Discharger shall submit a Public Participation Plan description of its completed and planned public participation efforts describing the process it will employ to actively involve the affected public in its decision-making process related to capital planning, including implementation of any additional to select updated long-term combined sewer system controls based on the results of the Consideration of Sensitive Areas Report. The affected public includes

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			SFPUC already has a robust public engagement program and is concerned that the requirement to submit a Plan indicates that the SFPUC will not be able to deviate from that plan without resubmittal of another plan to the Regional Water Board and EPA.	rate-payers (including rate-payers in separate sanitary sewer system service areas), industrial users, persons who use the receiving waters, and any other interested persons. The Public Participation Plan public participation efforts may include outreach through methods such as public meetings, direct mailers, billing inserts, press releases, postings of information on the Discharger's website, and development of advisory committees.
				Within 482 months of this Order's effective date.
23	20	Table 7, Task 3	The changes requested by the SFPUC are intended to more closely align the requirements of this task with the CSO Control Policy, which requires post-LTCP assessment of discharges to sensitive areas. These changes also incorporate the cost and performance considerations of Task 4, and the implementation plan of Task 7 to reduce the number of specific, but strongly interrelated, tasks contained within Table 7. The SFPUC has evaluated an extensive range of alternatives for CSD reduction as part of its capital program and is currently moving forward with a project (real-time Operational Decision Support, or ODS) that may identify improvements to operation of existing infrastructure to further optimize performance. The requested deletion of the specific alternatives enumerated in the Tentative Order is intended to provide flexibility to the SFPUC to more efficiently build upon work done to date. If EPA and the Regional Water Board are concerned that the scope of alternatives may be inappropriately limited, the SFPUC is amenable to submitting a scoping plan, similar to that submitted by the Bay Area Clean Water Agencies for the Nutrient Watershed Permit (R2-2014-0014).	Based on the results of the System Characterization Report, The Discharger shall submit a Consideration of Sensitive Areas Report that evaluates opportunities for improving reducing prioritizes, and proposes control alternatives needed to eliminate, relocate, or reduce the magnitude or frequency of discharges to sensitive areas from Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-004, CSD-005, CSD-006, and CSD-007. The Consideration of Sensitive Areas Report shall include the following, at a minimum: a. Provide updated water contact recreational use surveys, focusing particularly on recreational use following combined sewer discharges; b. Evaluate Identify control alternatives such as increases in storage capacity, increases in treatment capacity, off-shore relocation, green infrastructure, and modifications to operation of existing infrastructure, for each combined sewer discharge structure and the combined sewer system as a whole., including but not limited to the following: i. Green infrastructure and low impact development; ii. Increased storage within the combined sewer system; iii. Increased storage at the Oceanside Water Pollution Control Plant; iv. Increased treatment capacity at the Oceanside Water Pollution Control Plant; v. Operational changes to increase flows discharged at Discharge Point No. 001; vi. Increased pumping capacity at the Westside Pump

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			Finally, the SFPUC also requests that CSD-004 be removed from the list of outfalls discharging to sensitive areas. This outfall is located at a very remote location that can only be reached by a lengthy and rugged walk at very low tides through the rocky intertidal zone. No recreational or shellfishing is known to occur at this location because of its remoteness. These characteristics are one of the reasons that this outfall was constructed for drainage in the early 1900s.	Station; and vii. Use of high rate treatment technologies and disinfection to minimize pollutant loads. c. Evaluate the practical and technical feasibility of the proposed alternatives; d. Using a model, simulate existing conditions and expected conditions after construction and operation of each proposed alternative, including how the alternative would be expected to affect receiving water quality and combined sewer discharge volumes and frequencies at each combined sewer discharge outfall, and incorporating consideration of climate change and sea level rise; e. Summarize the feasibility, costs, and benefits of the evaluated alternatives; and e.f Prioritize and propose for implementation the proposed alternatives needed to eliminate, relocate, or reduce the magnitude or frequency of discharges from Discharge Point Nos. CSD 001, CSD 002, CSD 003, CSD 004, CSD 005, CSD 006, and CSD 007 Identify, based on the information generated under Tasks 3.a through 3.ed, above, and report on any improvements to be included into the Discharger's capital plan related to improvement of sensitive areas, and the cost and performance considerations and financial capabilities analysis required by Task 4. The identification and scheduling of improvements may consider costs relative to water quality and other public benefits, the Discharger's financial capabilities, community affordability, related infrastructure needs, and other appropriate integrated planning considerations. Within 482 months of this Order's effective date.
24	20	Table 7, Task 4	Deletion of this task is requested because the SFPUC proposes that the cost and performance considerations be incorporated into Task 3, Consideration of Sensitive Areas.	4. Cost/Performance Considerations The Discharger shall submit cost and performance considerations for each alternative considered in the Consideration of Sensitive Areas-Report. The Discharger shall include within this evaluation an analysis that determines where the increment of pollution reduction achieved

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				diminishes compared to increased costs (i.e., the "knee of the curve") and an analysis of its financial capabilities using EPA's Combined Sewer Overflows, Guidance for Financial Capability Assessment and Schedule Development (EPA 832-B-97-004, February 1997) or other appropriate guidance.
25	21	Table 7, Task 5	The changes requested to this section will ensure that SFPUC provides the Regional Water Board and EPA the desired documentation of the engineering rationale behind the provisions in VI.C.5.c.iv. Evaluation of opportunities to modify operation of existing infrastructure to increase wet weather storage and treatment has been added to the list of strategies to be evaluated under the Consideration of Sensitive Areas task (Task 3). As Task 3 includes specific analyses using a model to evaluate control alternatives, and these alternatives include modifications to operations, it is more fitting for the operations parameters be evaluated in Task 3. As noted in an earlier comment, please remove all references to sewer overflows in the combined system in this section. The occurrence of sewer overflows is not related to the system's ability to maximize treatment and storage except to the extent that they may indicate a reduction of in-line (collection system) storage due to FOG or sediment accumulation. As noted in the fact sheet, the collection system comprises a small percentage (approximately 3%) of the system's daily wet weather storage capacity.	 5. Operational Plan The Discharger shall submit an Evaluation Documentation of Wet Weather Operations Report that evaluates whether changes to existing system operations can be made to maximize pollutant removal during and after each precipitation event, such as minimizing the frequency, volume, or duration of combined sewer discharges and sewer overflows from the combined sewer system. The Discharger shall identifies propose a the set of operational parameters to be used as performance measures to ensure that wet weather operations maximize pollutant removal and minimize the frequency, volume, and duration of combined sewer discharges. The performance measures may include all or a portion of those listed in Provision VI.C.5.c.iv. At a minimum, the Discharger shall evaluate whether each operational requirement listed in Provision VI.C.5.c.iv is still appropriate, and if so, the Discharger shall provide the technical basis for that conclusion. The Discharger shall also consider additional performance metrics. b. Within 90 days of receiving written concurrence from the Regional Water Board Executive Officer and EPA pursuant to Provision VI.C.5.c.iv, the Discharger shall update its Operation and Maintenance Manual with any new or revised wet weather operational strategies, as required by Attachments D and G-sections I.C (Duty to Mitigate) and I.D (Proper Operation and Maintenance). Within 12 24 months of this Order's effective date.
26	21	Table 7, Task 7	Deletion of this task is requested because the SFPUC proposes that the schedule and related considerations be incorporated into Task 3,	7. Implementation Schedule The Discharger shall submit a draft Implementation Schedule with yearly milestones to implement the combined sewer system control

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			Consideration of Sensitive Areas. Because Task 3 contains in-depth analyses of potential control alternatives, this request will ensure all information relevant to identifying potential system improvements is included in a single document and will also reduce the number of deliverables.	selected based on the Consideration of Sensitive Areas Report. The duration of the implementation schedule shall be selected based on the results of the financial capability analysis required by Task 4. The implementation schedule may be phased based on the relative water quality benefits of the selected controls, the Discharger's financial capabilities, and other water quality related infrastructure improvements underway.
27	21	Table 7, Task 8	The change requested is to clarify that changes to the existing post-construction monitoring program may not be needed. The current wording presumes that modifications to the current post-construction monitoring plan will be appropriate.	8. Post-Construction Compliance Monitoring Program The MRP contains post-construction compliance monitoring requirements. The Discharger shall submit a Post-Construction Compliance Monitoring Plan proposing modifications, as appropriate, to the MRP for the next permit term to verify compliance with applicable water quality standards and protection of designated uses, as well as to ascertain the effectiveness of combined sewer system controls. At a minimum, the Post-Construction Compliance Monitoring Plan shall evaluate whether any reduction or increase in monitoring, or alternative monitoring, is appropriate.
28	A-5	Sewer Overflow from the Combined Sewer System	The SFPUC requests these changes to reduce ambiguity and to bring the definition more explicitly into alignment with the definition of "excursion" in the Southeast Water Pollution Control Plant permit. Specifically, the changes requested clarify that "flow" is wastewater, and that SOCSS do not reach surface waters. Any discharge from the combined sewer system that reaches surface waters is and has always been reported under the requirements of Attachment G.	Sewer Overflow from the Combined Sewer System Release or diversion of any flows untreated or partially treated wastewater from the combined sewer collection system that does not reach surface waters. Sewer overflows from the combined sewer system can occur in public rights of way or on private property. Sewer overflows from the combined sewer system do not include: (i) releases due to failures in privately-owned sewer laterals. (ii) overflows resulting solely from storm events in excess of the system's design capacity where the system is otherwise operated as designed, or (iii) authorized combined sewer discharges at Discharge Point Nos. CSD-001, CSD-002, CSD-003, CSD-004, CSD-005, CSD-006, or CSD-007, or discharges covered by Attachment G.
29	E-2	I.C.	DMR-QA studies are currently electronically submitted by e-mail to the State Water Board QA Officer. SFPUC requests that this submittal option be recognized in the permit.	C. The Discharger shall ensure that results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or most recent Water Pollution Performance Evaluation Study are submitted annually by either sending an electronic copy to the State Water Board Quality Assurance Officer or to the State Water Board at the following address

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30	E-3	Table E-1	SFPUC requests that the clarification be added to		Table E-1. N	Ionitoring L	ocations	
			monitoring location EFF-001D because it is commonly referred to among SFPUC staff as "decant".	Monit	toring Location	Monitoring Location Name		
					:			
					Transport/Storag weather) (previo as "decant")		EFF-001D	
					:		<u> </u>	
31	E-3	Table E-1	See detailed comments in Attachment D.	Monitoring Location Type	Monitoring Location Name	Monitoring	Location Description [1]	
				:	:	:		
				Combined Sewer Discharge Effluent	EFF-CSD-1	A monitoring location representative of combined sewer discharges from the Westside Transport/Storage Structure		
				Combined Sewer Discharge Effluent	EFF-CSD-1		e monitoring location for ary to Discharge Point	
				Combined- Sewer- Discharge- Effluent	EFF-CSD-2	A representative monitoring location for all waste tributary to Discharge Point Nos. CSD 002 and CSD 003.		
				Combined Sewer Discharge Effluent	EFF CSD 7	all waste tribut	re monitoring location for ary to Discharge Point, CSD 006, and CSD 007.	
				:	!	!		
32	E-4	Table E-1	The correct longitude for offshore receiving water Station 4 is -122.59500°, not -122.59001°, as converted from the current Oceanside permit	Monitoring Location Type	Monitoring Location Name		Location Description [1]	
			(i.e., -122° 35' 42.00'').	:				

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No.	Page	Section	Comment		Prop	osed Revisions	
				Offshore Receiving Water	Station 4		ing program station de -122. 59001 59500°, 7°
				:		:	
33	E-6	Table E-2, CBOD ₅ Monitoring	When testing CBOD ₅ , samples are diluted at different dilutions based on a predicted concentration range. Despite preparing samples at various dilutions, this testing method has the potential to result in invalid test results if the actual concentration is not within the predicted concentration range. Predicting a concentration range is particularly difficult during wet weather because it is difficult to estimate how much stormwater is contributing to the influent, and stormwater typically has much lower CBOD ₅ concentrations than does wastewater. SFPUC requests clarification from the Regional Board that it does not constitute a violation if the influent is sampled at the frequency specified and tested for CBOD, but the test results are deemed invalid or inconclusive due to CBOD ₅ concentrations out of the expected range and SFPUC is not able to resample within the same week. SFPUC would report such results as invalid in the corresponding self-monitoring report cover letter.	N/A			
34	E-6 – E-7	IV.A.1 and IV.A.2, Table E-3 and Table E-4	SFPUC requests the addition of a section and table for both dry and wet weather plant effluent monitoring for flow, CBOD ₅ , TSS and pH to clarify minimum sampling frequency for these parameters. Dry weather monitoring is currently separate from wet weather monitoring. It is SFPUC's interpretation that, even if there is a wet weather event in any given week, dry weather samples at Monitoring Location EFF-	effluent during d 001A and EFF-0	ry and wet we 01B as follow	ather at Monitori	itoring Minimum Sampling Frequency [3] Continuous/D

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			001A must be taken at the required minimum	<u>CBOD</u> ₅ [2]	mg/L	<u>C-24</u>	1/Week	
			sampling frequency. However, SFPUC may not	TSS	mg/L	<u>C-24</u>	5/Week	
			be able to comply with these frequencies at times	pH	standard	Continuous	1/Week	
			because the requirements are weather-dependent.	_	<u>units</u>	<u>or Grab</u>	17 VV CCR	
			For instance, if a wet weather event lasts three	Abbreviations:				
			days, there would not be enough days in the	MG = million gallons MGD = million gallons p	er dav			
			week to collect the minimum five samples required for TSS at Monitoring Location EFF-	mg/L = milligrams per lit				
			001A.	Sample Types and Freque				
			OUIA.	Continuous = measured c				
			SFPUC Laboratory staff currently schedule lab	Continuous/D = measured		and recorded and	reported daily	
			analyses for weekly monitoring parameters such	$\frac{\text{C-24} = 24\text{-hour composit}}{\text{Grab} = \text{grab sample}}$	<u>e</u>			
			as TSS, pH, and CBOD ₅ randomly to better	1/Week = once per week				
			characterize the effluent. During the rainy	5/Week = five times per v	<u>week</u>			
			season, there may be weeks in which TSS	77				
			monitoring is scheduled for Monday-Thursday	Footnotes:	ation shall be n	enarted in manthly	onthly self-monitoring reports:	
			and Saturday, but if Friday and Saturday are wet	Daily average f		eported in monun	y sen-momornig reports.	
			weather days, TSS would have been monitored	 Total monthly f 	low volume (N			
			only four times instead of the required five times				nd at Monitoring Location	
			per week.	EFF-001B in lieu of The minimum sampling			of effluent samples to be	
			A 1: 1 CEDUC (1 : 1 : C	collected during the	specified sampl	ing period, includ	ing samples collected	
			Accordingly, SFPUC proposes the inclusion of a	during dry and wet w	veather at Moni	toring Locations I	EFF-001A and EFF-001B.	
			footnote similar to Table E-2, footnote [2], to clarify that the minimum sampling frequency is	13 D W 41 D			.ddd	
			satisfied regardless of whether the results	12. Dry Weather. D plant effluent at Mon				
			correspond to EFF-001A or EFF-001B. In	piant emuent at Mon	mornig Loca	uion err-ooi <i>e</i>	as ionows.	
			addition, SFPUC requests the addition of a	Table E-34	Dry Weathe	er Plant Efflue	ent Monitoring	
			footnote to clarify that monitoring requirements		NATIONAL PROPERTY OF THE PROPE	Sample	Minimum Sampling	
			in the new table may be used to satisfy similar	Parameter	Units	Туре	Frequency [3]	
			EFF-001B monitoring requirements in Table E-4	[1]	MG/		-	
			of the Tentative Order.	Flow [1-]	MGD	Continuous	Continuous/D	
			The successful manifold as the sum and also	CBOD ₅	mg/L	C-24	1/Week	
			The suggested revisions shown are also consistent with Table E-4 of the Tentative Order	TSS	mg/L	C-24	5/Week	
			in allowing use of COD in lieu of CBOD during	42 T T	standard-	Continuous-	1 /\\\\ 2 = 1-	
			wet weather.	pH	units	or Grab	1/Week	
			wet weatner.	i				

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No.	Page	Section	Comment		Propos	ed Revisions	
				Remaining Ocean Plan Table 1 Pollutants [21]	μg/L	C-24 [32]	1/Year
				Abbreviations: MG = million gallons MGD = million gallons person. Sample Types and Freque Continuous = measured ec Continuous/D = measured C-24 = 24-hour composite Grab = grab sample 1/Week = once per week 5/Week = five times per v Footnotes: [14] The following informate	ncies: ontinuously continuously continuously continuously coek reck ation shall be r ow (MGD) low volume (A monitor for the tyltin, radioac parameters w rger may colle urring wet w	reported in monthled (AG) e pollutants listed tivity, acute toxicith analytical met ext a grab sample in the details of the content of the details of the de	in Ocean Plan Table 1, ity, and chronic toxicity. hods that require grab instead of a 24-hour
				•	· ·		
				Parameter	Vet Weath Units	er Plant Efflu Sample Type	ent Monitoring Minimum Sampling Frequency [3]
				Flow [1-]	MG/ MGD	Continuous	Continuous/D
				Chemical Oxygen Demand [1]	mg/L	C-24	1/Month
				TSS [1]	mg/L	C-24	1/Month
				pH [1]	standard units	Grab	1/Month
				Abbreviations:			

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				MG = million gallons MGD = million gallons per day mg/L = milligrams per liter µg/L = micrograms per liter					
					Sample Types and Frequencies: Continuous = measured continuously Continuous/D = measured continuously, and recorded and reported daily C-24 = 24-hour composite Grab = grab sample 1/Month = once per month 1/Year = once per year Footnotes: [1] The following information shall be reported in monthly self monitoring reports • Daily average flow (MGD)				
				Total monthly flow volume (MG) Effluent monitoring conducted in accordance with Table E-3 may be used to satisfy Table E-5 wet weather effluent monitoring requirements					
35	E-7 –	Table E-4, Footnote 2		Table E-4. Wet Weather Plant Effluent Monitoring					
	E-8				Parameter	Units	Sample Type	Minimum Sampling Frequency	
					Flow [1]	MG/ MGD	Continuous	Continuous/D	
					Duration of Blending [2]	minutes	Calculated	Continuous/D	
		potential to span multiple days. Binning the volumes and durations of these events into one value per day will reduce the potential for		Volume of Blended Wastewater Discharged [2]	MG	Calculated	Continuous/D		
			confusion in the reporting database.	L			***************************************		
				Fo	potnotes:				
				[2]	diverted around biolog	gical treatme h <u>day on wh</u>	ent units at the Ocea uch blending occurs	or blended with wastewater unside Water Pollution sevent, the Discharger shall mary-only-treated	

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No.	Page	Section	Comment	Proposed Revision	S			
36	E-8 – E-10	IV.B.1. and IV.B.2.	Regarding discharge monitoring for the Westside Transport/Storage Structures, SFPUC requests that the language requiring a sample be collected within two hours of discharge commencement be	Westside Transport/Storage Structure Effluent. During wet weather, the Discharger shall monitor Westside Transport/Storage Structure effluent at Monitoring Location EFF-001D as shown in Table E-5. The Discharger shall begin collecting aliquots or grab-samples within two hours of commencing discharge from the				
			relocated to avoid confusion. Sample collection staff may misinterpret the narrative language to indicate that samples must be collected for every discharge event. Moreover, the language conflicts with footnote [3] of Table E-5 where the former requires sampling within both two hours and the latter requiring a grab sample for discharges that last less than one hour. See Comment No. 38 for proposed revisions to Table E-5 footnote [3].	samples within two hours of commencing discharge from the Westside Transport/Storage Structure directly to Discharge Point No. 001.				
37	E-8 – E-9	Table E-5	SFPUC requests this modification because decant discharges often last less than 24 hours	Table E-5. Westside Transport/Storage Structure Effluent Monitoring				
			and it is difficult to predict the duration of decant	Parameter	Units	Sample Type		
			discharge. SFPUC requests flexibility in terms of sampling intervals and duration.	Flow Volume [1]	:	Continuous		
			or sampling intervals and duration.	TSS	i.	C 24 <u>C-X</u> ^[3]		
				Ammonia, total		C-24 <u>C-X</u> [3]		
				Arsenic	i	C-24_C-X ^[3]		
				Cadmium	÷	C-24_C-X [3]		
				Copper	1	C-24_C-X ^[3]		
				Lead		C-24 <u>C-X</u> [3]		
				Nickel	:	C-24 <u>C-X</u> [3]		
				Selenium		C-24_C-X [3]		
				Silver	i	C-24 C-X [3]		
				Zinc	:	C 24 C-X [3]		
				Remaining Ocean Plan Table 1 Pollutants [2]	· ·	C-24_C-X [3,4]		

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					Sample Type	s and Frequencies:		
				int		sample comprised of re than one hour at le	individual grab sampleast until sufficient san	
38	E-8 – E-9	Table E-5, Footnote 3	SFPUC requests revisions to the footnote for consistency with other monitoring requirements in the section. Removing the prescribed intervals between samples is consistent with the sample type modification proposed above (see Comment No. 37). The second sentence is removed and the requirement to collect a sample with two hours of discharge is added here per Comment No. 36.	du:	ervals for as lon ration. If the dis e grab sample. I thin two hours o	ng as possible a t equa charge lasts less thar The Discharger shall	begin collecting alique arge from the Westsid	nd report record the reger shall collect at least ots or grab samples
39	E-9 – E-10	IV.B.2	request to designate a single CSD monitoring location, EFF-CSD, consistent with the current	me EF	onitor combin FF-CSD Mon SD-7 as follo	ned sewer discha hitoring Locations ws:		nitoring Location CCSD 2, and EFF
				١,	Table	E-6. Combined	Sewer Discharge	and the second s
			E-6. The method hold time of 15 minutes cannot be realistically achieved because the occurrence of a CSD cannot be predicted and on-call staff		Parameter	Units	Sample Type	Minimum Sampling Frequency
			will not be able to collect and analyze a sample		TSS	mg/L	C-24 C-X [2]	3/Year ^[4]
			under this hold time constraint. The installation		рН	standard units	Grab	3/Year ^[4]
			of a continuous pH sensor is not practical because of the episodic nature of a CSD event; if		Ammonia, total	mg/L as N	C-24_C-X [2]	3/Year ^[4]
			left dry for extended periods of time, the		Arsenic	μg/L	C-24 C-X [2]	3/Year ^[4]
			analyzer will not function correctly.		Cadmium	μg/L	C-24 C-X [2]	3/Year ^[4]
					Copper	μg/L	C-24_C-X [2]	3/Year ^[4]
			SFPUC requests a modification to the "C-X"		Lead	μg/L	C-24_C-X [2]	3/Year ^[4]
			sample type because CSDs typically last less		Nickel	μg/L	C-24 C-X [2]	3/Year ^[4]
			than 24 hours and it is difficult to predict the		Selenium	μg/L	C 24 C-X [2]	3/Year ^[4]
			duration of the discharge. SFPUC requests flexibility in terms of sampling intervals and		Silver	μg/L	C-24_C-X [2]	3/Year ^[4]
			duration to maximize the likelihood of collecting		Zinc	μg/L	C 24 C-X [2]	3/Year ^[4]
			sufficient volume for all required analyses in	'		***************************************		

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			light of the highly variable and uncertain duration of CSDs. SFPUC requests edits to Table E-6 footnote [1] to exclude volatile organic compounds (VOCs)	Remaining Ocean Plan Table 1 μg/L C-24 C-X [2.3] 1/Year [4] Pollutants [1]
	to et and a pe our requilable chrowhide wear chrowing series and a pe our requilable chrowhide wear chrowing series and a	to exclude volatile organic compounds (VOCs), and hexavalent chromium. Field samplers utilize a peristaltic (vacuum) pump, which precludes our ability to follow the sample collection requirements (i.e., grab samples) in the required laboratory methods for VOCs. For hexavalent chromium, the method hold time is 24 hours, which may not be achievable during certain wet weather events. SFPUC prefers to monitor total chromium instead of hexavalent chromium. SFPUC requests edits to Table E-6 footnote [2] because CSDs on the Westside typically do not last more than three hours. Aliquots collected at one-hour intervals are unlikely to generate sufficient sample volume for all required analyses.	Sample Types and Frequencies: C-24 = 24 - hour composite C-X = composite sample comprised of individual grab samples collected at equal intervals of no more than one hour at least until sufficient sample volume for the required analyses are completed. Footnotes: [1] The Discharger shall monitor for the pollutants listed in Ocean Plan Table 1, except chlorine, tributyltin, radioactivity, acute toxicity, and chronic toxicity, volatile organic compounds, and hexavalent chromium. [2] If the discharge lasts less than 24 hours, the Discharger shall sample for as long as possible at equal one hour intervals and report record the duration. If the discharge lasts less than one hour, the Discharger shall collect at least one grab sample.	
40	E-12, E-13	V.A.3 and V.C	SFPUC asks that whole effluent chronic toxicity retesting or accelerated monitoring be required "as soon as possible," the same requirement as the current permit, rather than "within seven days." SFPUC performs chronic toxicity tests using wild-caught marine organisms provided by a commercial supplier in southern California. Test organisms are not always immediately available, depending on ocean and weather conditions, and wet weather days may preclude immediate retesting as EFF-001C reflects dry weather only. As a result, seven days is insufficient time to reliably begin a new test.	 A. Methodology 3. If an effluent toxicity test does not meet all test acceptability criteria in the test methods manual, the Discharger shall resample and retest within seven days as soon as possible. C. Accelerated Monitoring 1. If a chronic bioassay test indicates a violation of the chronic toxicity effluent limitation, the Discharger shall retest within five days of receiving test results, or within seven days if the sample is contracted out to a commercial laboratory as soon as possible. Accelerated monitoring shall consist of four toxicity tests conducted at approximately two-week intervals. The Discharger

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				shall return to routine monitoring if all four monitoring test results are "Pass."
41	E-15	V.F.4	SFPUC requests the removal of the requirement to conduct the screening study during consecutive months. The effluent limits for chronic toxicity only apply during dry weather, so the screening must also be conducted during dry weather. Removing the requirement to conduct the screening study during consecutive months will make it easier to schedule the test, which is already constrained by the availability of wild-collected marine organisms.	b. Stage 2 shall consist of a minimum of two test batteries conducted monthly using the three most sensitive species determined based on the stage 1 test results.
42	E-16	V.F.6	SFPUC requests a change in the maximum concentration of the dilution series stipulated for the chronic toxicity screening test, from 100% to 75% effluent. Conducting the test on marine organisms with 100% effluent will require adjusting the salinity using commercial-grade crystallized sea salt. In contrast, SFPUC's typical test procedure is to adjust the salinity using seawater brine made from Pacific Ocean water. Using locally-produced brine is preferable for three reasons: (1) Brine is more representative of the receiving	6. The Discharger shall conduct screening tests at 100 75, 20, 0.67, 0.37, and 0.17 percent effluent.
			water, (2), salt addition can create artificial toxicity, and (3) data for this test using sea salts are not available so using salt crystals instead of brine is considered provisional per EPA/600/R-95-136. The highest-concentration test that can be conducted using brine for salinity adjustment is 75% effluent. SFPUC believes that the 75%	
			effluent solution will provide a satisfactory endpoint for assessing test organism sensitivity.	

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43	E-16	Table E-10	Table requirements of three fecal indicator bacteria	Table E-10. Ambient Shoreline Monitoring				
		and Table E-11		Parameter	Units	Sample Type	Minimum Sampling Frequency	
			Oceanside permit - that is, replace fecal coliform	Enterococcus [1]	MPN/100 mL [2]	Grab	1/Week	
			with <i>E. coli</i> . Title 17 CCR § 7958 states the minimum protective bacteriological standards for	Fecal coliform E. coli	MPN/100 mL [2]	Grab	1/Week	
			waters adjacent to public beaches and public	Total coliform	MPN/100 mL [2]	Grab	1/Week	
			water-contact sports areas are based on single sample results for total coliform, fecal coliform, or enterococcus bacteria, indicating that any one of these parameters can be used an indicator of beach health. It is unclear why all three of these parameters need to be monitored. In addition, the turnaround time for <i>E. coli</i> Fecal coliform Enterococcus Fecal coliform E. coli		11. Post-CSD Ever	nt Shoreline	Monitoring	
				Parameter	Units	Sample Type	Minimum Sampling Frequency	
				Enterococcus [1]	MPN/100 mL [2]	Grab	1/Day ^[3]	
				Fecal-coliform- E. coli	MPN/100 mL [2]	Grab	1/Day ^[3]	
				Total coliform	MPN/100 mL [2]	Grab	1/Day ^[3]	
		decisions sooner. The Colilert test, which simultaneously detects and quantifies both total coliform and <i>E. coli</i> , provides final results within 18 hours. In contrast, the additional laboratory analysis (Multiple-Tube Fermentation) for fecal coliform will require further staff coordination, more laboratory staff time, and additional material costs, and final results are not available until 48-72 hours after the test. The long duration of the fecal coliform incubation period renders results of limited utility for beach posting decisions.	Standard Observations [4]			1/Day ^[3]		
			18 hours. In contrast, the additional laboratory analysis (Multiple-Tube Fermentation) for fecal coliform will require further staff coordination, more laboratory staff time, and additional material costs, and final results are not available until 48-72 hours after the test. The long duration of the fecal coliform incubation period renders results of limited utility for beach					
44	E-17	Table E-11, Footnote [4]	SFPUC requests minor modifications to the reporting requirements for post-CSD shoreline monitoring in Table E-11, Footnote 4. Standard observations for Beach and Shoreline monitoring are listed in Attachment G section III.B.3, not Attachment G section III.B.1. In addition, SFPUC notes that it is infeasible to estimate the spatial extent of wastewater present in the surf				nt G section III.B.1 The estimated size of the	

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			zone. In lieu of estimating the size of the affected area, SFPUC will report the event duration and estimate volume of CSDs, as required by Attachment E section IV.2.b.							
45	E-18	Table E-12	12 SFPUC requests removal of molybdenum,	_	Table E	E-12. Preti	eatment a	ınd Biosoli	ds Monito	ring
			organic nitrogen, ammonia nitrogen, and total			Influent	Effluent		Sample Type	
			solids from this table, because monitoring of these constituents is not required under the pretreatment program. SFPUC will continue to		Constituents	INF- 001A	EFF- 001A [1]	Biosolids BIO-001	Influent and Effluent	Biosolids [7a]
			monitor these constituents under the biosolids		:	i	1	i	i	i
			land application program.		Molybdenum	:	÷	÷	<u>:</u>	•
					Organic- Nitrogen	÷	<u> </u>	<u> </u>	÷	<u>;</u>
					Ammonia- Nitrogen	<u>:</u>	<u> </u>	÷	<u> </u>	÷
					Total Solids	<u>:</u>	÷	÷	÷	÷
46	F-3	Table F-1, Facility Contact, Title and Phone	Dale Miller's phone number is (415) 242-2225.		ale Miller, Op 20-4600 <u>242-22</u>		uperintend	ent, Wastev	water Ente	rprise, (415)
47	F-4	II.A.2	Similar to Comment No. 5, SFPUC requests language clarifying that compliance with the State Water Board Order No. 2006-0003-DWQ as amended by Order No. WQ 2013-0058-EXEC is separate from the NPDES permit. The requested language is consistent with the recently adopted permits for West County Agency (R2-2019-0003) and City of Palo Alto (R2-2019-0015).	Collection System. The Discharger's collection system is predominantly a combined sewer system with some limited separate sanitary sewers. The combined sewer system consists of approximately 250 miles of pipe, one major pump station (Westside Pump Station), six minor pump stations (four all-weather pump stations: Westside, Sea Cliff No. 1, Sea Cliff No. 2, and Pine Lake; and two wet weather pump stations: Sea Cliff No. 3 and Zoo Wet Weather Lift Station), and three large transport/storage structures (Westside Transport/Storage Structure, a 49.3-million-gallon box-like structure located beneath the Great Highway; Richmond Tunnel, a 12.0-million-gallon tunnel located to the north; and Lake Merced Tunnel, a 10.0-million-gallon tunnel located to the south). The separate sanitary sewer systems serve isolated areas and are also regulated separately under State Water Board Order No. 2006-0003-			(Westside pump ne Lake; oo Wet uctures on box-like runnel, a Merced The			

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				DWQ as amended by State Water Board Order No. WQ 2013-0058- EXEC.
48	F-5	II.A.3.b	SFPUC requests that the clarification be added to the Fact Sheet that wet weather discharge from the Westside Transport/Storage Structure is commonly referred to among SFPUC staff as "decant".	In addition to pumping up to 65 MGD to the plant, the Westside Pump Station can also pump flow from the Westside Transport/Storage Structure to Discharge Point No. 001 during wet weather (commonly known as "decant").
49	F-5	II.A.3.b	SFPUC requests the edits to more accurately describe the design capacity of the Westside Pump Station wet weather pumps. SFPUC engineers working on the Westside Pump Station Reliability Improvements Project analyzed the pump performance curves for the wet weather pumps from the manufacturer and determined that the pump flowrates range from 98 to 133 MGD in three operating scenarios depending on two factors: (1) the quantity of pumps operating and (2) model/type of pumps selected to operate (as shown in the table below). The table values assume the same Net Positive Suction Head is available for all operating scenarios, and high water levels in the Transport/Storage Box (i.e., high hydraulic head). Each pump model has a rated flow capacity and total dynamic head. The two pump model numbers correspond to a high flow, low head Model CP 3501 pump (best suited to pump out flows to the ocean outfall) and a low flow, high head Model CP 3151 pump (best suited to pump to the Oceanside Plant in certain operating scenarios to maximize treatment.) The operating scenarios vary the number of pumps in operation and model numbers (corresponding flow and head capacities) of the pumps in operation, that then in turn vary the total wet-weather flow capacity for conveying flow out to the ocean outfall.	The design capacity of the Westside Pump Station wet weather pumps ranges from 98 to 133 MGD depending on the number and model of pumps operating when there is high hydraulic head, or high water levels, in the West Box (typically observed during wet weather operations), is 110 MGD when three pumps are operating and up to 130 MGD when all four pumps are operating.

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			Wet-Weather / West Pump Chamber Pump Configuration Operating Scenarios 3-High Flow Capacity - Model CP 3501 1-High Head Capacity - Model CP 3531 2-High Flow Capacity - Model CP 3501 1-High Head Capacity - Model CP 3531 3-High Flow Capacity - Model CP 3531 3-High Flow Capacity - Model CP 3501 109 M	Level ather ons) GD D	
50	F-5	II.A.4	While the Oceanside Plant has the capac produce Class A biosolids, it may not be consistently do so depending on a number factors, such as a potential plant process Moreover, the Oceanside Plant recently experienced a digester lining failure in Ja 2019 and has been producing Class B biosince that time.	temperature-phased anaerobic digestion, which is capable of producing to produce Class A biosolids. Primary sludge, waste activated sludge, and secondary scum are mixed and co-thickened using gravity belt thickeners prior to being fed to the anaerobic digestion system. The digestion system accepts hauled-in batches	of ter resses r uled over,
51	F-6	II.B.2	SFPUC requests the changes to the fact seconsistency with Paragraph II.A3.b. on puring certain storms, such as those that microclimatic or intense from either nort south portions of San Francisco, CSDs noccur when maximum capacity is reache local transport/storage structures althoug maximum capacities may not have been at the Oceanside Plant and the Westside Transport/Storage Structure.	ge F-5. CSD-005, CSD-006, and CSD-007. During wet weather, who the Westside Pump Station capacity is exceeded, equivalent-to primary-treated wastewater is discharged to the Pacific Ocean Discharge Point Nos. CSD-001, CSD-002, CSD-003, and CSD-004, Discharges of equivalent-to-primary-treated wastewater at Discharge Point Nos. CSD-005, CSD-006, and	en o- o at
52	F-10	III.C.2	SFPUC requests retaining language from 2009 permit (pages F-11 and F-22) that references the 1989 bacteriological study language provides important background information.	71, amending Order No. 88-106 to delete disinfection requiremen	

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				Francisco Ocean Outfall. The studies were conducted in 1987 and 1988. The findings indicated that the non-disinfected wastewater discharge from the Discharge Point 001 did not violate the Ocean Plan bacteriological body-contact standards. The Discharger now treats its wastewater to secondary treatment standards during dry weather. Regional Water Board staff used data from that study representing primary treatment to estimate the potential effects of discharging secondary-treated effluent (Regional Water Board staff memorandum, October 10, 2008). Estimated bacteria levels in federal waters were below Ocean Plan water quality objectives, so the Regional Water Board found that the deep water discharge could not affect bacteria levels in State waters.
53	F-14	III.D	The SFPUC requests more detail be included in the fact sheet regarding fecal indicator bacteria 303(d) listings.	This Order does not authorize any discharge to receiving waters on California's list of impaired waters. The Pacific Ocean at Fort Funston, Ocean Beach, Mile Rock and China Beach are not impaired for indicator bacteria. The Pacific Ocean at Baker Beach is no longer listed as impaired for indicator bacteria because the sixteen available lines of evidence show applicable water quality standards are not being exceeded.
54	F-18	IV.C.1	See explanation provided in Comment No. 2, related to the overly broad requirement to comply receiving water limitations, and Comment No. 20 related to the CSO Control Policy requirements applicable to cities that have implemented a long-term control plan (LTCP).	During wet weather, this Order imposes narrative effluent limitations at VI.C.5.c, not numeric limitations, on the Discharge Points identified in Table 2 of this Order. In accordance with the Combined Sewer Overflow (CSO) Control Policy, this Order requires the Discharger to implement and update its Long-Term Control Plan to reflect post-construction monitoring results and continued consideration of sensitive areas.
55	F-25	IV.C.5.b	See explanation provided in Comment No. 2.	b. Wet Weather. For wet weather discharges from Discharge Point No. 001 and CSD-001 through CSD-007 identified in Table 2 of this Order the combined sewer discharge points, the Long-Term Control Plan required pursuant to the Combined Sewer Overflow (CSO) Control Policy and described in Provision VI.C.5.c of the Order serves as the narrative WQBELs in this Order that are necessary to achieve applicable water quality standards, including to protect existing and designated uses. For wet weather discharges from the Discharge Points in Table 2 of this Order, the terms at VI.C.5.c are the applicable WQBELs. The terms at V and G.I.I.1 do not apply.

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56	F-30	VI.C.5	Changes to the Fact Sheet are requested to align it with changes requested to the permit.	For sewer overflows from the combined sewer system, Provision VI.C.5.a.viii(b) requires the Discharger to notify and report SOCSS to the State's Online CIWQS database, consistent with the sanitary sewer overflow reporting requirements of State Water Board Order. No. 2006 0003 DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems," as amended by State Water Board Order No. WQ 2013 0058 EXEC and any subsequent order updating these requirements. Water Code sections 13267 and 13383, 40 C.F.R. section 122.41(h), and the Combined Sewer Overflow (CSO) Control Policy authorize the Regional Water Board and EPA to require information about releases of untreated or partially treated wastewater. This information is necessary relevant to evaluating the efficacy of the Discharger's implementation of the Nine Minimum Control related to maximizing the use of the collection system for storage combined sewer system performance, and operations and maintenance practices; to determine whether any diversions of untreated or partially treated wastewater result in a discharge to surface waters; to satisfy public notification requirements; to identify whether the public could be affected; and to establish whether sewer overflows from the combined sewer system result in a nuisance as defined by Water Code section 13050.
57	F-32	VI.C.7	SFPUC requests a more specific definition of "flame retardants," which in its broadest definition encompasses many classes of chemicals, not all of which would be expected in municipal wastewater or stormwater. Based on the precedent of other permitted discharges to the Pacific Ocean (such as Hyperion Treatment Plant) and the justification for the special study in the Tentative Order, SFPUC plans to focus the study on polybrominated diphenyl ethers (PBDEs) and chlorinated organophosphate flame retardants.	7. Flame Retardant Special Study This special study is necessary to evaluate the potential impacts of flame retardants (i.e., polybrominated diphenyl ethers and chlorinated organophosphate flame retardants) in receiving waters. During EPA consultation with the National Marine Fisheries Service pursuant to the Endangered Species Act and Magnuson-Stevens Act, the National Marine Fisheries Service expressed concern about the presence of flame retardants in plant effluent and flame retardant mass loadings to the Pacific Ocean because organophosphates have been widely detected in San Francisco Bay water, sediment, and aquatic life tissue, and because polybrominated diphenyl ether (PBDE) and tris(1,3-dichloro-2-propyl)phosphate (TDCP) concentrations in San Francisco Bay water have regularly exceeded predicted no effect concentrations for marine settings (EPA Biological Evaluation, April 2019). This special study is consistent with other NPDES permits that authorize discharge to the Pacific Ocean.

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58	G-2		Please see Attachment B for more detailed comments.	1. Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or nuisance as defined by California Water Code section 13050.
			If the Regional Water Board and EPA do not delete this standard provision and the broad requirement to comply with receiving water limitations, (see Comment No. 2, the SFPUC requests the edits specified in Comment Nos. 3, 54, and 55to more explicitly clarify the applicability of these provisions to dry weather discharges only.	

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